

## Claims

I claim:

1. An apparatus comprising:
  - a central portion;
  - a gasket portion disposed around the central portion to substantially seal against an inside wall of a pipe as the apparatus is being pulled through the pipe in a tow direction; and
  - a break-away section coupled to the central portion opposite the tow direction, the break-away section including a frangible connector such that the break-away section pulls the gasket portion away from the inside wall after sufficient force opposite the tow direction is applied to the break-away section.
2. The apparatus of Claim 1, wherein the gasket portion comprises a conical section gasket having a small diameter end attached to the central portion and a large diameter end substantially sealing against the inside wall of the pipe.
3. The apparatus of Claim 2, wherein the conical section gasket is formed from a sheet of rubber.
4. The apparatus of Claim 2, wherein water pressure is capable of assisting the seal between the conical section gasket and the inside wall of the pipe when the apparatus is being towed in the tow direction.
5. The apparatus of Claim 2, wherein the gasket material is sufficiently flexible to substantially seal against the inside wall of the pipe while the apparatus is traversing obstructions in the pipe.
6. The apparatus of Claim 1, wherein the tow line is a cable.
7. The apparatus of Claim 1, wherein the tow line is a hose.

8. The apparatus of claim 1, wherein the break-away section includes a chain and a link coupled between the chain and the gasket.
9. The apparatus of claim 8, wherein the frangible connector includes two links of the chain, separated by a third link of the chain, coupled with a frangible link.
10. The apparatus of claim 1, further including a centralizing section.
11. The apparatus of claim 10, wherein the centralizing section includes fins disposed around a center to keep the apparatus substantially in the center of the pipe.
12. An apparatus, comprising:
  - a central portion, the central portion including a centralizing portion and a plug portion; and
  - a gasket portion disposed around the central portion, the gasket portion capable of substantially sealing against an inside wall of a pipe as the apparatus is being pulled through the pipe in a tow direction by a tow line coupled to the central portion.
13. The apparatus of claim 12, wherein the centralizing portion includes centralizing fins radially disposed around a central axis of the plug portion.
14. The apparatus of claim 13, wherein the centralizing fins are attached to a pipe.
15. The apparatus of claim 12, further including a break-away section coupled between the central portion and the gasket.
16. The apparatus of claim 15, wherein the break-away section includes a chain and a link coupled to the chain.
17. The apparatus of claim 16, wherein the chain includes at least one set of three links where two links of the chain, separated by a center link, can be joined by a frangible link.
18. A method of working on a pipe, comprising:
  - pulling a tow apparatus through a section of pipe to be worked in a tow direction;

attaching a sliding pipe plug to the tow apparatus, the sliding pipe plug having a central portion with a gasket disposed about the central portion;

towing the sliding pipe plug through the pipe, wherein the sliding pipe plug substantially seals against the pipe while being towed; and

breaking the seal against the pipe in order to pull the tow apparatus in a direction opposite the tow direction.

19. The method of Claim 18, wherein the tow apparatus includes a sonde and a sonde cable.

20. The method of Claim 18, wherein the tow apparatus includes a high pressure hose.

21. The method of Claim 20, wherein a sonde is further attached to the sliding pipe plug opposite the high pressure hose.

22. A method of FELL testing, comprising:

passing a haul line through a pipe section;

attaching a sonde to the haul line, the sonde being attached to a sonde cable;

hauling the sonde and the sonde cable through the pipe section with the haul line;

detaching the haul line from the sonde;

attaching a sliding pipe plug to the sonde cable;

towing the sliding pipe plug and the sonde by the sonde cable through the pipe section in a tow direction while performing the FELL test; and

breaking the seal against the pipe in order to pull the tow apparatus in a direction opposite the tow direction if the sliding pipe plug becomes obstructed.

23. The method of Claim 22, wherein attaching the sliding pipe plug to the sonde cable comprises:

passing the sonde through a center section of the sliding pipe plug until the center section is around the sonde cable;

positioning pieces of the end caps around the sonde cable;

attaching the end caps to the center section of the sliding pipe plug in order to attach and seal the sliding pipe plug to the sonde cable.

24. The method of Claim 23, wherein attaching the end caps includes engaging threads on the end caps with threads in the center section of the sliding pipe plug.

25. The method of Claim 23, wherein attaching the end caps includes screwing the pieces of the end caps to the center section with screws.

26. The method of Claim 22, further including monitoring water pressure at the sonde while performing the sonde testing.

27. The method of Claim 26, wherein a drop in water pressure is utilized to indicate a leak.

28. A method of FELL testing, comprising:

passing a tow line through a section of pipe;

attaching a sliding pipe plug to the tow line;

attaching a sonde, which is attached to a sonde cable, to the sliding pipe plug opposite the tow line;

performing a FELL test while towing the sliding pipe plug through the section of pipe by the tow line, wherein the sliding pipe plug substantially seals the pipe while being towed by the tow line.

29. The method of Claim 28, wherein the tow line is a hose.

30. The method of Claim 29, wherein passing the tow line through the section of pipe includes pressure cleaning the section of pipe wherein a high-pressure nozzle attached to

the hose is propelled through the section of pipe by the high-pressure water of the pressure cleaning.

31. The method of Claim 29, wherein attaching the sliding pipe plug includes connecting the high-pressure hose to a pipe connector on a center portion of the sliding pipe plug.

32. The method of Claim 29, wherein the hose supplies water to cover the sonde.

33. The method of Claim 28, further including monitoring pressure at the sonde while performing the FELL test.

34. The method of Claim 33, wherein a drop in pressure at the sonde is utilized to indicate a leak.

35. The method of Claim 28, wherein towing the sliding pipe plug through the section of pipe with a tow line includes controlling the velocity of the sliding pipe plug through the section of pipe with a brake.

36. A sliding pipe plug, comprising:

- means for attaching to a tow line;

- means for sealing against the inside wall of a pipe coupled to the means for attaching; and

- means for breaking the seal when pulling opposite the tow line.

37. A sliding pipe plug, comprising:

- means for attaching to a tow line;

- means for sealing against the inside wall of a pipe coupled to the means for attaching; and

- means for centering the means for sealing within the pipe.